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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/476,711	12/30/1999	DAVID O. MCGOVERAN		8198

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GEORGE S COLE
495 SEAPORT COURT SUITE 401
REDWOOD CITY, CA 94063

EXAMINER

BOYCE, ANDRE D

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 06/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/476,711

Applicant(s)

MCGOVERAN, DAVID O.

Examiner

Andre Boyce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 14, 2003 has been entered.
2. Claims 1-15 are currently pending, since Applicant did not cancel that claims via the amendment filed March 14, 2003, and are still rejected as seen in Office Action filed October 16, 2002. New claims 21-35 will be renumbered 16-30, as seen in the objection below. Further, new claims 16-30 will be examined to further prosecution, despite the fact that the claims are not entered, since Applicant did not list the claims as added, in the amendment filed March 14, 2003. Applicant must cancel, amend and/or add claims via an **amendment**. Claims **are not** considered cancelled, added, and/or amended as part of a substitute specification.

New Matter Added to the Specification

3. The amendment (and substitute specification) filed March 14, 2003 (previously filed July 26, 2002) is objected to under 35 U.S.C. 132 because it introduces new

matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. With reference to the newly submitted specification filed March 14, 2003, the added material which is not supported by the original disclosure is as follows: page 4, lines 3-8, page 4, lines 22-26, page 6, lines 1-28, page 7, lines 1-25, page 13, lines 19-22, page 17, lines 15-21, page 18, lines 16-28, page 19, lines 1-28, page 20 lines 1-14, page 29, line 28, page 30, lines 1-5, page 31, lines 22-28, and page 32, lines 1-10.

Applicant's detailed arguments in the response concern what the Applicant perceives as the Examiner's failure to consider how the new material was used in the amended specification, failure to analyze the new material in its context, and failure to cross-correlate the new material with the already filed drawings and claims. After carefully reviewing Applicant's response, the original specification and drawings, the Examiner submits that in an attempt to clarify the concepts expressed in the original specification, Applicant has indeed added new matter.

First, any addition of new matter anywhere in the specification is deemed as such, therefore adding new matter in the background of the invention is as objectionable as adding new matter in the detailed description. Further, by adding new matter in the background, Applicant concedes, via the addition of new matter, that the original specification did not adequately explain the state of the art. Similarly, if the original specification adequately disclosed the state of the art then any addition of new matter would not be necessary to begin with.

Second, Applicant's reasoning for adding "new material", namely an attempt to clarify what was originally disclosed, doesn't preclude the clarification from containing new matter. Once again Applicant concedes, via the addition of new matter, that the original specification did not adequately explain the invention. Similarly, if the original specification adequately disclosed the invention then any addition of new matter would not be necessary to begin with.

Lastly, Applicant's assertion of inherency (as seen throughout the response), with regards to the "new material", doesn't preclude the addition of new matter, but rather lends itself to multiple interpretations of one skilled in the art. By "possibly incorporating" (see amendment filed 3/14/03, page 10, line 18) what is supposedly inherent, is equivalent to it not definitively being inherent. As a result, its incorporation may be and is viewed as an addition of new matter.

Also, claims 16-30 also contain new matter not originally disclosed and are rejected to as seen below. Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Objections

4. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether

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entered or not). Misnumbered claims 21-35 have been renumbered 16-30, and will be referenced as such.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 16-30 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 16 recites "...dynamically managing a process through an emergent and inductive approach that anticipates possible conditions and desired actions...", which was added via the Applicant's amendment filed March 14, 2003 and was not described in the original specification, and is considered to be new matter. The Examiner submits that "dynamically managing a process" is not the same as "managing a dynamic process" (the claim language originally used by Applicant). Claims 17-23 and 30 depend either directly or indirectly from claim 16, thereby containing the same new matter therein.

Claim 24 recites "...dynamically managing a process ...", which was added via the Applicant's amendment filed March 14, 2003 and was not described in the original specification, and is considered to be new matter. The Examiner submits

that "dynamically managing a process" is not the same as "managing a dynamic process" (the claim language originally used by Applicant). Claims 25 and 26 depend either directly or indirectly from claim 24, thereby containing the same new matter therein.

Claim 27 recites "...a dynamically adaptable device ...", which was added via the Applicant's amendment filed March 14, 2003 and was not described in the original specification, and is considered to be new matter.

Claim 28, which was added via Applicant's amendment filed March 14, 2003 recites "A method for inducing a business process from a set of defined conditions...". This portion of the claim was not described in the original specification and is considered to be new matter.

Claims 29-30 were added via Applicant's amendment filed March 14, 2003 and the limitations therein were not described in the original specification and are considered to be new matter.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 17, 19, 21-23 and 26-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 17 and 21 are rendered vague and indefinite for use of the term "suitable". Suitable, defined as able or qualified, does not distinctly point out what

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would or would not be considered as such, thus leaving the claim vague and indefinite. Claim 22 is rejected as being dependent upon claim 21.

Claims 19 and 23 are rendered vague and indefinite, since they contain both an apparatus (i.e. general purpose computer) and the method steps incorporated therein.

Claim 26 is rendered vague and indefinite for use of the term "preferentially". The term indicates that the subsequent limitation may or may not occur, but would be preferred.

Claim 27 recites the limitation "said particular action" and "said dynamic process". There is insufficient antecedent basis for this limitation in the claim.

Claim 28 is rendered vague and indefinite, since it is a hybrid claim incorporating a means into the method. See MPEP 2173.05(p). In *Ex parte Lyell*, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990). Claim 29 is rejected as being dependent upon claim 28.

Claim Rejections - 35 USC § 101

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. Claims 16-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and

(2) whether the invention produces a useful, concrete, and tangible result.

First, for a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts. In the present case the independent claims 16, 24, and 28 only recites an abstract idea. The recited steps of declaring an objective, stating corresponding rules, testing each rule, delegating, and internalizing feedback does not involve, use, or advance the technological arts, since the steps could be performed using pencil and paper. Further, Applicant concedes in response filed March 14, 2003 that this "reasoning approach" does not require computer implementation.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention is merely a "reasoning paradigm", producing no concrete and tangible result. The steps of declaring, stating, testing, actuating, delegating, and internalizing, even when reduced to a form of logic do not produce a tangible result. It merely defines a theoretical approach/roadmap (i.e., paradigm) for a business to follow.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 16-24 and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bidgoli (Handbook of Management Information Systems: A Managerial Perspective, November 1998), in view of Kaplan et al (Linking the Balanced Scorecard to Strategy, Fall 1996).

As per claim 16, Bidgoli discloses a method for dynamically managing a process through an emergent and inductive approach that anticipates possible conditions and desired actions (total quality management (TQM) incorporating expert system technology, see page 276-277 and 300, ¶ 4), comprising declaring an objective of the process as a set of measurable goals and constraints (see page 288, ¶ 1 and 2), stating for each objective at least one corresponding and applicable set of rules wherein each rule contains both a condition governing that rule's actuation, and that rule's action when the condition is met, and wherein the set of rules may act in any combination, subject to the limitation that the condition of a particular rule must be met before the particular action may occur, testing each rule against conditions both internal and external, as they exist in the real world, without specifying the order of testing, unless the order becomes governed by the actuation of at least one rule whose precondition governing its actuation becomes satisfied (i.e., TQM

implementing a rule based expert system, page 505), and actuating a rule when its condition is met (inference engine, see page 501). Bidgoli does not explicitly disclose delegating the objective to at least one specific actor, wherein each said specific actor inherits from all superior actors conditions as constraints and actions as goals, and passes upwards all actions as instantiations of conditions, and all information necessary for altering any objective when the objective does not conform to the real world. Kaplan et al discloses delegating an objective to a specific employee as a leading indicator (i.e., hours spent with customer, see page 72, ¶ 1). Both Bidgoli and Kaplan et al are concerned with effective organization and process management, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include delegating the objective to at least one specific actor in Bidgoli, as seen in Kaplan et al, as an effective and employee specific distribution of objectives.

As per claims 17 and 21, Bidgoli does not disclose the steps done in a declarative method suitable for reduction to a form of formal logic. However, Bidgoli discloses TQM using new technologies to improve implementation (see page 300, ¶ 4), such as a rule-based expert system, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the steps done in a declarative method suitable for reduction to a form of formal logic in Bidgoli, for use in an expert system, thereby improving implementation.

Claims 18-19 are rejected based upon the rejection of claim 16, since they are the method steps instantiated in a computer program and the general-purpose

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computer programmed to implement the method, respectively, corresponding to claim 16.

As per claim 20, Bidgoli discloses internalizing feedback for both performance and process (i.e., use of feedback to measure progress, see page 288, #6). Bidgoli does not explicitly disclose incorporating into the method, steps for creating, differentiating, modifying, and deleting any objective, goal, constraint, set of rules or rule. Kaplan et al discloses using feedback from the balanced scorecard to learn about the validity of the objectives being used, in order to either re-affirm the current strategy or affirm the need of a new strategy and new, differentiated, or modified objectives (page 68, ¶ 1 and 2). Both Bidgoli and Kaplan et al are concerned with effective organization and process management, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include steps for creating, differentiating, modifying, and deleting any objective in Bidgoli, as seen in Kaplan et al, as an effective means of implementing an alternate method based upon feedback.

Claims 22-23 are rejected based upon the rejection of claim 20, since they are the method steps instantiated in a computer program and the general-purpose computer programmed to implement the method, respectively, corresponding to claim 20.

Claim 24 is rejected based upon the rejections of claims 16 and 20, since it contains the same limitations therein.

Claim 27 is rejected based upon the rejection of claim 24, since it is the device claim corresponding to the method claim.

Claim 28 is rejected based upon the rejection of claim 24, since it contains the same limitations therein. Further, Bidgoli discloses the method used in a business process (page 294).

As per claim 29, Bidgoli discloses creating and maintaining a dynamic and self-referential representation of the induced business process within the model, and changing the dynamic and the self-referential representation as and in accordance with each change in the set of defined conditions, constraints, rules, and elements comprising the model (i.e., meta-knowledge, the ability of an expert system to learn from experience, see page 500).

As per claim 30, Bidgoli does not disclose including at least one anticipatory defined condition, constraint, rule, or element. Kaplan et al discloses leading indicators, which are measurements of objectives based upon an anticipatory objective (i.e., condition, see exhibit 7). Both Bidgoli and Kaplan et al are concerned with effective organization and process management, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include at least one anticipatory defined condition in Bidgoli, as seen in Kaplan, as an efficient way of determining future performance.

Response to Arguments

13. Before addressing the arguments with respect to the ***claim language***

(emphasis), several of the Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Further, several of Applicant's arguments are concerned with features not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The Examiner will begin by addressing several of Applicant's arguments not related specifically to the claim language, but deemed relative in regards to prosecution of the invention. First, contrary to Applicant's assertion, Applicant's invention and any reference cited (including Bidgoli) do not have to have the exact same number of limitations and/or steps for anticipation to be met. None of the case law cited by Applicant indicates that the reference must have **exactly** (emphasis) the same amount of steps in order to anticipate or render obvious, Applicant's invention.

Second, Bidgoli does not teach against Applicant's claimed invention. The claim language (emphasis) indicates managing a process, which does not preclude Bidgoli and TQM. An organization is indeed a process of measurable objectives.

Next, contrary to Applicant's assertion, Bidgoli does not teach against using an expert system (ES). The Examiner submits that the synergy between TQM and AI,

specifically expert systems, is indeed contemplated by Bidgoli through the acknowledgement that "There are many new technologies that can improve the ability to implement TQM programs..." (see page 300, ¶ 4). Further, Bidgoli's discussion of AI as "...being used by companies to decide what parts to ship.." is simply an example of AI implementation.

Finally, contrary to Applicant's assertion that Bidgoli provides no enabling implementation, Bidgoli discloses numerous companies that have been using TQM and TQM related techniques with positive results (TQM in action, see page 298).

With respect to the claim 16, the Examiner submits that Bidgoli discloses total quality management (TQM) able to incorporate expert system technology. Applicant argues that Bidgoli does not mention rules, set of rules, condition, or actuation. The Examiner submits that Bidgoli discloses a rule based expert system, as seen in the above rejection, which is disclosed as being implementable within TQM. Also, delegation is disclosed by Kaplan et al, as seen in the above rejection of claim 16.

With respect to claim 20, the Examiner submits that Bidgoli indeed discloses use of feedback to measure progress (see page 288, #6), which does not contradict Applicant's invention.

With respect to claim 28, Applicant argues that Bidgoli does not disclose inducing a business process from a set of defined conditions, constraints, rules, and elements. The Examiner submits that the recitation has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or

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the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

With respect to claim 29, Bidgoli discloses meta-knowledge as the ability of an expert system to learn from experience (see page 500), thereby creating and maintaining a dynamic and self-referential representation of the business process. Contrary to Applicant's assertion, this indeed discloses the limitations of the claim.

Allowable Subject Matter

14. Claims 25 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Further, claims 25 and 26 would have to overcome any rejection(s) under 35 U.S.C. § 101 and 112, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Boyce whose telephone number is (703) 305-1867. The examiner can normally be reached on 9:30-6pm M-F.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and After Final communications, and (703) 746-7305 for informal/draft communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.



adb
May 31, 2003



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